

From: Nancy Costa <ncosta@servnt.fdl.cc.mn.us>
To: Kathy Mayo <MAYO.KA@EEN@epamail.epa.gov>
Date: 3/11/99 1:49pm
Subject: WQS

Kathy:

I'm still trying to reach Gary Kimball of MPCA to help me answer a few specifics on your checklists. Otherwise, I think I've managed to cover all the other questions and suggestions from your list of clarifications needed, the GLI checklist, and general comments. Attached is a detailed list of responses, and I'd like to set up a conference call for early next week with you & Dave (and probably Chris Berini, our program manager) so we can figure out what still needs to happen to get these approved. How would Monday late morning or early afternoon work for you guys? Let me know, and in the meantime I'll keep working on reaching Gary. We can use Chris' office for the call - her number is (218) 879-8427.

Thanks - Nancy

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Kathy:

I just wanted to get some responses down on paper to the clarifications EPA needed from Fond du Lac regarding our WQS. I'll go down the list you emailed me, item by item, so we can more easily focus on the gaps that still exist.

A. More stringent human health values:

- 1) These values do indeed come from MPCA's calculations, using GLI methods. Nearly a year ago, when Chris and I met with the tribal attorney, he was fairly adamant that we delete all references to Minnesota Rules (the state's standards) in the body of the standards. He felt that regardless of where these numerical criteria were lifted from, it was important to present a document to the tribal Reservation Business Committee that represented Fond du Lac standards and designated uses, and that the ordinance not be full of references to the state of Minnesota. The references to the federal GLI numbers and methods were acceptable, because of the government-to-government relationship between the tribe and the federal government, and were retained in the text. I will check with the attorney to see if we can cite MPCA as the source for the newly-calculated values, as a footnote or citation in the Appendices.
- 2) I believe this reference is language similar to 40 CFR Part 132.5 (Procedures for adoption and EPA review, under (g)-(2): *For pollutants other than those listed in Tables 1, 2,.....* My sense is that our author added that language to cover any pollutants which may show up in FdL waters, which were not anticipated or covered in the standards, and to assure that any requisite "criteria will be derived as necessary" according to Tier I or Tier II protocol defined in 40 CFR 132.

B. Nineteen extra values listed that were not requested by the GLI:

I searched for the origin of all 19 of these values, and was able to find the source of all but 3 of them: Minnesota Rules Chapters 7050 (waters of the state) and 7052 (Lake Superior basin waters, which conforms to the GLI). As I mentioned in our phone call yesterday, I believe some of the apparent discrepancies are an artifact of our trying to mesh the applicable standards from the state's use classifications and Fond du Lac's, which wasn't an exact "fit". For the most part, however, our water body classifications translate to the higher quality/use designations of the state's.

For example, the first 3 aquatic life acute criteria (423 for Chlorobenzene, 137 for 2,4-Dimethylphenol, and 379 for 2,4-Dinitrophenol) all correspond to the "Aquatic Life Maximum Standard" column in Minnesota Rules 7052 for all classes of waters. The Toluene and Methylene Chloride values correspond to the Aquatic Life Maximum Standards applicable to Class 2B, 2C and 2D waters. These are Tier I or Tier II values in accordance with the way they appear in the GLI.

The following values also appear in Minnesota Rules 7052: Chlorobenzene (10), 2,4-Dimethylphenol (21), 2,4-Dinitrophenol (71), Toluene (253), Methylene Chloride (1561),

Pentachlorophenol (1.9, 5.5), Arsenic (2, 53), Endrin (0.016).

I was unable to find the origin of these 3 values: PCB (13), toxaphene (31) and trichloroethylene (27). I will talk to Gary Kimball of MPCA to clarify or correct those numbers.

*recalculated
by MPCA using
60 g/day
fish consumption
rate.*

C. Human health PCB value

Once again, the PCB value we used from MPCA was (I'm told) reflective of EPA's proposed changes, but I will try to find out the details of the calculation.

D. Antidegradation

It was our intent to be more inclusive of any agent or situation that could impair water quality, not just BCCs (i.e., thermal loading, oxygen depletion, excess nutrients, etc.). Should we change "BCCs" to be consistent? - *No need to change. Okay as written.*

E. Question on Pentachlorophenol formulas

The two Pentachlorophenol formulas are lifted out of Minnesota Rules 7052, from their tables for criteria that vary with pH: the first, for Class 2A, Lake Superior; 2A other than Lake Superior; and 2Bd; and the second formula for Classes 2B, 2C, and 2D. Those state classes correspond to the Fond du Lac classes cited for each formula.

F. Bacteriological standards

A typo; I will make the change to 126 organisms/ 100 ml.

G. Definition change

I will correct the definition from NOAEL to NOEC, including the text explanation for NOEC.

H. Minor changes and clarifications needed:

- 1) The selenium value of 20 also appears in Minnesota Rules, rather than rounded down to 19. Change?
- 2) Appendix 2 (b) covers designated use A; the C2 is a typo and will be changed to C1.
- 3) The wildlife PCB value of 122 also appears in Minnesota Rules, rather than 120. Change?
- 4) I will change the word "ammonia" to "nitrogen" to reflect the nutrient rather than a pollutant.
- 5) See 2) above.
- 6) The values in our table in Appendix 2, c were taken directly from Minnesota Rules. Change?
- 7) Selenium was omitted from the table I constructed from Minnesota Rules. Add?
- 8) The chronic conversion factor was listed as N/A for mercury and silver in Minnesota Rules. Insert 0.85?

Great Lakes Water Quality Initiative Adoption Checklist for Fond du Lac

*Human cancer value definition (section 201 aa): Yes, it was our intent to cover more water-related activities (cultural and traditional) than just recreational, and therefore be more stringent. But after reading our definition (modeled after the GLI), I'm confused by the two-tiered nature of the definition. What does this reflect?

*I don't recall deriving a new BAF; if I indicated that in any of our conversations about the standards, I may have been referring to the site-specific modification language. As far as I know, our numbers are based upon GLI methodology.

*I will check with MPCA regarding the factors used to calculate criteria based upon an assumed 0.06kg/day fish consumption rate (trophic level, slope).

*"Pollutant by pollutant" basis is language taken directly out of the GLI (p. 15379).

*Exemptions from antidegradation review: the phrase "a short term, temporary lowering is allowed" comes from the GLI regarding their Outstanding National Resource Waters. We included it because we have a project affecting the wild rice lakes (our ORRWs) which will restore a seriously impacted rice lake to its historical size, but the impoundment construction may result in temporary sedimentation or BOD problems, and we don't want to prevent ourselves from being able to undertake remediation projects because of our WQS.

*I think the phrase "regulated activity" is a typo; seems like we should change it to "facility".

*We could easily add a phrase indicating that approval of the antidegradation demonstration should occur before commencement of the activity. I think that was the intent of that section, but we could clarify it.

*Variance comments: We can add the suggested phrases ("review and modify as necessary", "compared with compliance with WQS absent the variance"). The extra item ("for BCCs, a GLI pollutant minimization program") is from Minnesota Rules. We can add the 90-day timeline for making a final decision on a variance.

General Comments and concerns

2) We're satisfied with the term "prolonged contact" in these descriptions.

3) We don't have any water bodies with a Class A (public water supply) designated use, as groundwater is the source for both private wells and community water supply. I'm not sure whether we need to retain the references to Parts 141 and 143, but as long as we define Class A waters in our standards, doesn't there need to be some references to those applicable standards (just in the event that sometime in the future, a lake or stream may be redesignated)?

5) I will change the heading to "Conditions to Grant a Variance".

I believe all the other items on this list have been addressed.